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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/769,966

02/02/2004

Shen-Hong Chou

250122-1180

9132

24504 7590 02/09/2007  
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EXAMINER

TSIDULKO, MARK

ART UNIT

PAPER NUMBER

2875

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/769,966

Applicant(s)

CHOU, SHEN-HONG

Examiner

Mark Tsidulko

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,7,9-12,17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,9-12,17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

The submission of RCE and amendment filed on 1/13/2007 is acknowledged. At this point claims 1, 2, 11 and 12 have been amended, claims 3-6, 8, 13-16, 18 have been canceled and the remaining claims left unchanged. Thus, claims 1, 2, 7, 9-12, 17, 19 and 20 are at issue in the instant application.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7, 9, 11, 12, 17, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (US 6,856,087) in view of Maeshima et al. (US 6,486,923).

Referring to Claims 1, 2, 11, 12 Lin et al. disclose (Fig.5H) a display device having a backlight (col.7, line 22) including a plurality of cells [51] wherein each cell has three colors (RGB) LEDs. It is well known in the art, that backlight device is used for illumination of LCD panels.

Lin et al. disclose the instant claimed invention except for RGB LEDs arranged in a quadrilateral with an adjacent green LED.

Maeshima et al. disclose (Figs.10A, 10B) a light source including a plurality of basic cells [2], each having three unique colors of first, second and third LEDs and adjacent LED,

Art Unit: 2875

wherein the LEDs obtain RGGB quadrilateral arrangement, in order to optimize the quality of the picture and balancing the factors of graininess, resolution and accurate color rendition (col.5, lines58-61).

Referring to Claims 9 and 19 Lin et al. disclose (Fig.5B) a planar surface on which the light is disposed.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the cells of the device of Lin et al. having an adjacent green LED arranged in quadrilateral, in order to optimize the quality of the picture and balancing the factors of graininess, resolution and accurate color rendition.

Referring to Claims 7 and 17 Lin et al. disclose the instant claimed invention except for varying the intensity of the cell by varying power to one of the LEDs.

The intensity of the cell, composed of four LEDs, will be inherently varied, if power varying will change the intensity of any member of the cell. It is understood, that the value of the power to any of the LEDs can be provided depending on necessity what intensity of the cell should be obtained.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the variable power supply of the LEDs in the device of Maeshima et al., in order to obtain variable color balance.

Art Unit: 2875

Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. in view of Maeshima et al., as applied to claims 2 and 11 above, and further in view of Frank et al. (US 4,125,319).

Lin et al. in view of Maeshima et al. disclose the instant claimed invention except for light control and dispersion device.

Frank et al. disclose a light control device disposed above the light source (Fig.4) and including a dispersion layer (Abstract, col.11, line 60)

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the light control device of Frank et al. for the device of Lin et al. and Maeshima et al., in order to control the light rays incident on an operative area.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection. US 6,486,923 to Maeshima et al. discloses all limitations of claims 1 and 11.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

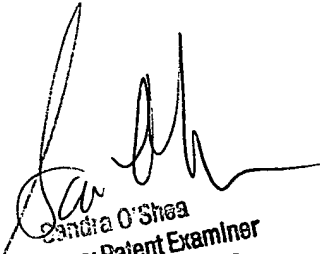
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the

Art Unit: 2875

organization where this application or proceeding is assigned is (571) 273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.  
February 1, 2007



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800